

# Work Order ID 59882

Tuesday, June 15, 2010 1:45:26 PM

Page 1

Item ID: D2574

Revision ID:

Item Name: Saddle, Aft In 205

Start Date: 6/15/2010 Start Qty: 12.00

Required Date: 6/30/2010 Req'd Qty: 12.00

Reference:

Accept

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Approvals: Process Plan:                      Date: 10/6/15 Tooling:                      Date:                       
QC:                      Date:                      SPC (Y/N):                      Date:                     

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2574	Rev E								
100	HAAS CNC VERTICAL MACHINING #1	0.00							
HAAS 1									
HAAS CNC vertical machine #1	<p>Memo</p> <p>Program Batch No. <u>59882</u> Double check by: <u>                    </u> <input type="checkbox"/> 1-Machine Step            No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine            Step No 2 per Folio FA051 and inspect per attached Dimension Sheets <input type="checkbox"/> 3-            Machine Step No 3 per Folio FA051 and insp</p>	0.00				12	0		
110	CONVENTIONAL MILLING MACHINE	0.00							
Mill Conv									
Conventional Milling Machine	<p>Memo</p> <p>Machine keyway as per dwg D2573 &amp; D2574</p>	0.00				12	0		
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC									
Quality Control	<p>Memo</p>	0.00				12	0		

H.A 10/07/08

10.7.12  
H.A 10/07/13

10.7.12  
H.A 10/07/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59882

Tuesday, June 15, 2010 1:45:26 PM



Page 2

Item ID: D2574

Revision ID:

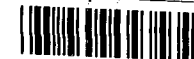
Accept



Item Name: Saddle, Aft In 205

Setup

Start



Start Date: 6/15/2010 Start Qty: 12.00

Stop



Required Date: 6/30/2010 Req'd Qty: 12.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

MU  
10/07/14

12

0

140



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

12

BR 10-7-14.

150



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

0.00

START TIME:

320° FINISH TIME:

10:31

OVEN TEMPERATURE:

11:00

12

BR 10-7-15.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 59882

Tuesday, June 15, 2010 1:45:26 PM



Page 3

Item ID: D2574

Revision ID:

Accept

Item Name: Saddle, Aft In 205

Start Date: 6/15/2010 Start Qty: 12.00

Required Date: 6/30/2010 Req'd Qty: 12.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160



QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

=> M1 10/07/15

12 0

170



Packaging

Packaging

Identify as per dwg & Stock Location:

437

Memo

0.00

0.00

10/7/16 (12)

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

0.00

10/7/18

MF

10-7-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, June 15, 2010 1:45:29 PM

Page 1

Work Order ID: 59882

Parent Item: D2574

Parent Item Name: Saddle, Aft In 205



Start Date: 6/15/2010

Start Qty: 12.00

Required Date: 6/30/2010

Required Qty: 12.00

Comments: IPP Rev: I As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-005 Saddle Billet		Manufactured	No			110	Each	82.0000	1	12			



Location

MAT46

46411

58676 ✓

Loc Qty

82

44

38

Loc Code

12.000

G.A 10/07/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



SHOWN BY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY

SUBJECT TO A CONTROLLED COPY  
WITHOUT A CONTROLLED COPY  
WORK ORDER

NO. 59882

RELEASED

05.12.06

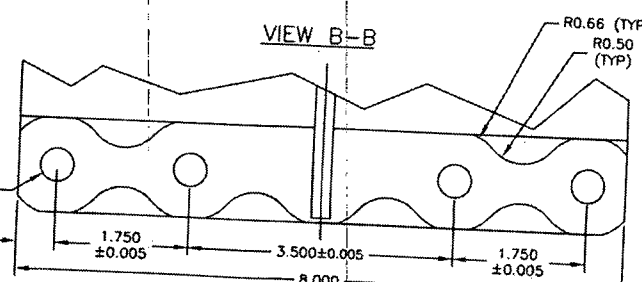
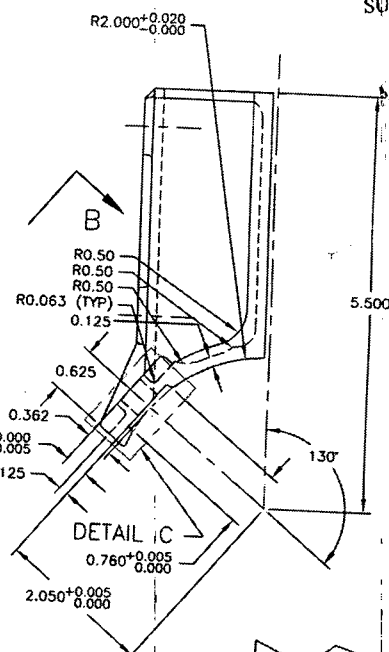
# NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)  
(REF DART SPEC. D6102-003)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 3 CHAMFER 0.063 x 45° ALL AROUND
- 4 CHAMFER 0.033 x 45° (SEE DETAIL C)

E

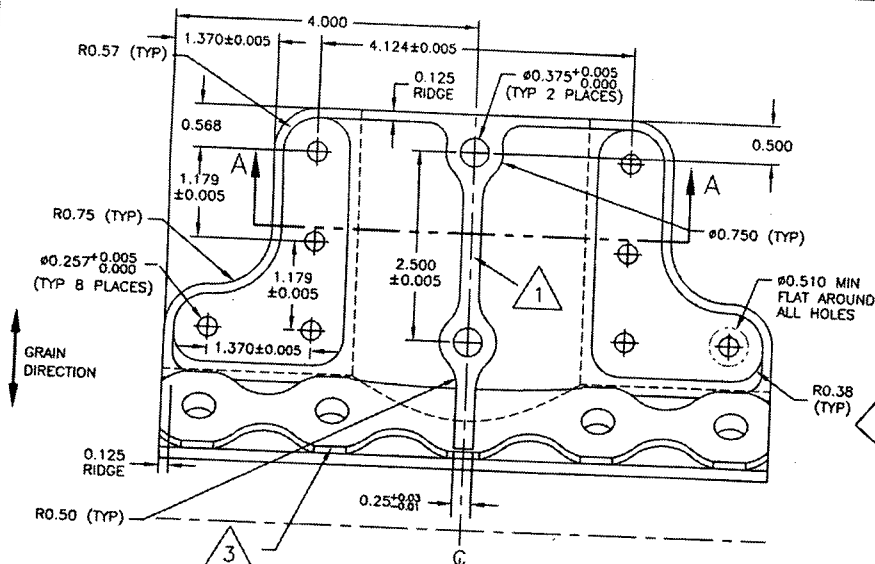
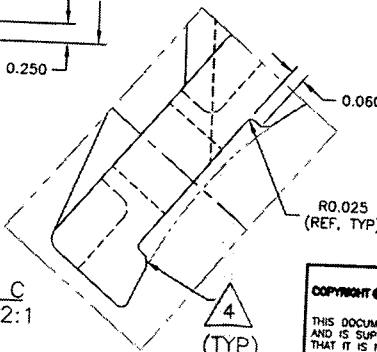
## VIEW B-B



E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCOMP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED	#	APPROVED #
DATE	05.07.13	TITLE INNER AFT SADDLE
DRAWING NO.	02574	REV. E
SHEET 1 OF 1		SCALE 2:3

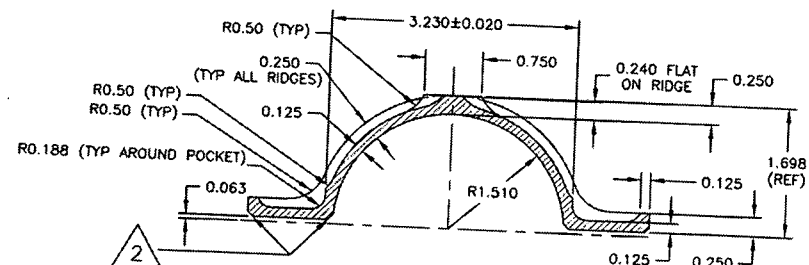
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DART AEROSPACE LTD.

DETAIL C  
SCALE 2:1



GRAIN  
DIRECTION

## SECTION A-A



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	59882
<b>Description:</b> Saddle, Aft Inboard		<b>Part Number:</b>	D2574
<b>Inspection Dwg:</b> D2574 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.500	.500	.500	.500		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.502	.502	.502	.502		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.570	.570	.570	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.127	.127	.127	.127		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.255	.255	.255	.255		
S	0.115	0.135		.132	.134	.130	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.229	3.229	3.229	3.229		
V	0.230	0.250		.241	.241	.241	.241		
W	0.115	0.135		.125	.126	.125	.125		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.762	.762	.762	.762		
Z	0.352	0.372		.360	.360	.360	.360		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.627	.627	.627	.627		
AC	0.053	0.073		.058	.058	.058	.058		
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.500	1.520		1.513	1.515	1.514	1.515		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.265	.265	.265	.265		
AH	0.240	0.260		.250	.250	.250	.250		
AI	2.000	2.020		2.000	2.002	2.000	2.000		
AJ	0.023	0.043		.025	.025	.025	.025		
Accept/Reject									

Measured by: <i>[Signature]</i>	Audited by: <i>[Signature]</i>
Date: 10.7.12	Date: 10/07/14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

1875  
The first of the year  
was a very dry one  
and the crops were  
very poor. The  
winter was also very  
dry and the crops  
were very poor.

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	59882
<b>Description:</b> Saddle, Aft Inboard		<b>Part Number:</b>	D2574
<b>Inspection Dwg:</b> D2574 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				5	6	7	8		
A	0.438	0.443		.440	.440	0.440	0.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.503	.503	0.502	0.501		
G	0.257	0.262		.258	.258	0.259	0.259		
H	0.375	0.380		.376	.376	0.376	0.376		
I	0.490	0.510		.502	.502	0.501	0.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	0.569	0.569		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.127	.127	0.127	0.127		
Q	0.115	0.135		.135	.135	0.135	0.135		
R	0.240	0.260		.256	.256	0.256	0.256		
S	0.115	0.135		.125	.125	0.123	0.123		
T	0.178	0.198		.188	.188	0.188	0.188		
U	3.210	3.250		3.229	3.229	3.229	3.229		
V	0.230	0.250		.238	.238	0.238	0.238		
W	0.115	0.135		.125	.125	0.125	0.124		
X	0.307	0.312		.310	.310	0.310	0.310		
Y	0.760	0.765		.762	.762	0.762	0.762		
Z	0.352	0.372		.360	.360	0.362	0.362		
AA	0.470	0.530		.500	.500	0.500	0.500		
AB	0.615	0.635		.627	.627	0.627	0.627		
AC	0.053	0.073		.063	.063	0.063	0.063		
AD	0.240	0.260		.248	.248	0.248	0.248		
AE	1.500	1.520		1.518	1.518	1.519	1.516		
AF	0.115	0.135		.125	.125	0.125	0.125		
AG	0.240	0.280		.260	.260	0.270	0.270		
AH	0.240	0.260		.248	.248	0.248	0.248		
AI	2.000	2.020		2.000	2.000	2.011	2.007		
AJ	0.023	0.043		.025	.025	0.025	0.025		
Accept/Reject									

Measured by:	af
Date:	10.7.12

Audited by:	MR
Date:	10/07/14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 59582
<b>Description:</b> Saddle, Aft Inboard		<b>Part Number:</b> D2574
<b>Inspection Dwg:</b> D2574 Rev. E		<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				9	10	11	12		
A	0.438	0.443		0.440	0.440	0.440	0.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		0.501	0.501	0.502	0.501		
G	0.257	0.262		0.259	0.259	0.259	0.259		
H	0.375	0.380		0.376	0.376	0.376	0.376		
I	0.490	0.510		0.500	0.500	0.501	0.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.569	0.570	0.569	0.569		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		0.127	0.127	0.127	0.127		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.256	0.256	0.256	0.256		
S	0.115	0.135		0.123	0.123	0.124	0.123		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.229	3.229	3.229	3.229		
V	0.230	0.250		0.239	0.240	0.237	0.239		
W	0.115	0.135		0.125	0.130	0.133	0.132		
X	0.307	0.312		0.310	0.310	0.310	0.310		
Y	0.760	0.765		0.762	0.762	0.762	0.762		
Z	0.352	0.372		0.361	0.362	0.362	0.362		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.627	0.627	0.627	0.627		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.248	0.248	0.248	0.248		
AE	1.500	1.520		1.516	1.516	1.516	1.517		
AF	0.115	0.135		0.125	0.125	0.125	0.125		
AG	0.240	0.280		0.270	0.270	0.270	0.270		
AH	0.240	0.260		0.247	0.248	0.248	0.247		
AI	2.000	2.020		2.007	2.007	2.007	2.007		
AJ	0.023	0.043		0.025	0.025	0.025	0.025		
Accept/Reject									

Measured by: H.A	Audited by: MW
Date: 10/07/13	Date: 10/07/14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	